

Course Title	<b>DATA ANALYTICS</b>				
Course Code	ACF-432				
Course Type	Compulsory				
Level	Undergraduate				
Year / Semester	3 / Six				
Teacher's Name					
ECTS	5	Lectures / week	3	Laboratories / week	
Course Purpose and Objectives	<p>This course prepares students to gather, describe, and analyze data, and use advanced statistical tools to make decisions on operations, risk management, finance, etc. Analysis is done targeting economic and financial decisions in complex systems that involve multiple partners. Topics include probability, statistics, hypothesis testing, regression, clustering, decision trees, and forecasting.</p>				
Learning Outcomes	<p>On completion of this course, students should be able to:</p> <ul style="list-style-type: none"> <li>▪ Gather sufficient relevant data, conduct data analytics using scientific methods, and make appropriate and powerful connections between quantitative analysis and real-world problems.</li> <li>▪ Demonstrate a sophisticated understanding of the concepts and methods; know the exact scopes and possible limitations of each method; and show capability of using data analytics skills to provide constructive guidance in decision making.</li> <li>▪ Use advanced techniques to conduct thorough and insightful analysis, and interpret the results correctly with detailed and useful information.</li> <li>▪ Show substantial understanding of the real problems; conduct deep data analytics using correct methods; and draw reasonable conclusions with sufficient explanation and elaboration.</li> <li>▪ Write an insightful and well-organized report for a real-world case study, including thoughtful and convincing details.</li> <li>▪ Make better business decisions by using advanced techniques in data analytics.</li> </ul>				